



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/626,168	07/27/2000	Julian Mullaney	NC056-US1/5487-81	9565

7590 12/29/2004

Marguerite E Gerstner  
Tyco Electronics Corporation  
M/S R20/1B  
307 Constitution Drive  
Menlo Park, CA 94026-1164

EXAMINER

ESCALANTE, OVIDIO

ART UNIT	PAPER NUMBER
----------	--------------

2645

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/626,168

Applicant(s)

MULLANEY ET AL.

Examiner

Ovidio Escalante

Art Unit

2645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-49, 51-62 and 69-82 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-12, 14-20, 26-30, 32-38, 40-52, 61, 62, 70-76 and 79-82 is/are rejected.
- 7) ☒ Claim(s) 5, 13, 21-25, 31, 39, 53-60, 63, 77 and 78 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/26/02, 2/12/01, 2/07/01, 11/06/00
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is in response to applicant's preliminary amendment filed on September 1, 2004. **Claims 1-49,51-62,69-82** are now pending in the present application.

#### ***Information Disclosure Statement***

2. The information disclosure statements submitted on November 6, 2000, February 7, 2001, February 12, 2001 and February 26, 2002 were received. The submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly the information disclosure statements are being considered by the examiner.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4,6-11,14-16,19,20,51,52,69 and 70 are rejected under 35 U.S.C 102(b) as being anticipated by Giacoppo et al. US Patent 4,115,665.

***Regarding claim 1***, Giacoppo teaches a telecommunications terminal block (fig. 2) for making and breaking connections with a telecommunications conductor, (fig. 3; col. 1, lines 33-40), said terminal block comprising:

a base (14) having a first connector and a second connector mounted therein, (fig. 3; col. 2, lines 19-25; first and second connectors are within base (14) for connecting the base with the conductors);

a first conductor (13b) extending from the base, the first conductor being electrically connected to the first connector, (fig. 3; col. 2, lines 19-25);

a second conductor (13a) extending from the base, the second conductor being electrically connected to the second connector, (fig. 3; col. 2, lines 19-25); and

a service module (20) configured to be removably mounted to the base, (fig. 3; col. 2, lines 19-38), the service module comprising:

a service wire connector (22a, 22b) configured to receive a customer telecommunications conductor, (col. 2, lines 35-38); and

a contact member (23a, 23b) that electrically connects the service wire connector to the first conductor when the service module is mounted to the base, (col. 2, lines 29-38);

wherein the first conductor and the second conductor are configured so as to electrically connect the first connector and the second connector when the service module is removed from the base (fig. 3; col. 2, lines 25-38) and wherein the service module is configured to interrupt the electrical connection of the first connector and the second connector when the service module is mounted to the base, (col. 2, line 65-col. 3, line 5).

**Regarding claim 2**, Giacoppo, as applied to claim 1, teaches wherein the contact member is configured to disconnect the electrical connection of the first connector and the second connector when the service module is mounted to the base, (col. 2, lines 25-38; col. 2, line 65-col. 3, line 5).

**Regarding claim 3**, Giacoppo, as applied to claim 2, teaches wherein the service wire connector comprises a first end of a longitudinally extending conductive member positioned to receive the customer telecommunications conductor (col. 2, lines 35-38) and wherein the contact

Art Unit: 2645

member comprises a second end of the longitudinally extending conductive member, the second end of the longitudinally extending conductive member contacting the first conductor when the service module is mounted to the base, (fig. 3; col. 2, lines 25-38).

**Regarding claim 4**, Giacoppo, as applied to claim 3, teaches wherein the service module (20) further comprises a conductor chamber and the service wire connector is positioned in the conductor chamber, (fig. 3; col. 2, lines 29-38).

**Regarding claim 6**, Giacoppo, as applied to claim 3, teaches wherein the first conductor is positioned adjacent to the second conductor so as to contact the second conductor when the service module is removed from the base, (fig. 3; col. 2, lines 29-38).

**Regarding claim 7**, Giacoppo, as applied to claim 6, wherein the service module further comprises a nonconductive member positioned to pass between the first conductor and the second conductor when the service module is mounted to the base and wherein the first conductor and the second conductor comprise a spring clip, (fig. 3; col. 2, lines 29-38).

**Regarding claim 8**, Giacoppo, as applied to claim 7, teaches wherein the nonconductive member extends from a bottom surface of the service module adjacent the base, (fig. 3).

**Regarding claim 9**, Giacoppo, as applied to claim 7, teaches wherein the contact member comprises:

an electrically conductive layer on a surface of the nonconductive member adjacent the first conductor when the service module is mounted to the base, (fig. 3; col. 2, lines 29-38); and

a connector that electrically connects the electrically conductive layer to the service wire connector, (fig. 3).

**Regarding claim 10**, Giacoppo, as applied to claim 7, wherein the nonconductive member includes a channel in a surface thereof adjacent the first conductor when the service module is mounted to the base and wherein the contact member is received in the channel of the nonconductive member, (fig. 3; col. 2, line 65-col. 3, line 5).

**Regarding claim 11**, Giacoppo, as applied to claim 7, teaches wherein the first connector comprises a first end of a second longitudinally extending conductive member and the first conductor comprises a second end of the second longitudinally extending conductive member (fig. 3; col. 2, lines 10-38) and wherein the second connector comprises a first end of a third longitudinally extending conductive member and the second conductor comprises a second end of the third longitudinally extending conductive member, (fig. 3).

**Regarding claim 14**, Giacoppo, as applied to claim 10, teaches wherein the terminal block further comprises:

a third connector and a fourth connector mounted in the base (14), (fig. 3; second base in fig. 3);

a third conductor (13b) extending from the base, the third conductor being electrically connected to the third connector, (fig. 3; col. 2, lines 19-25);

a fourth conductor (13a) extending from the base, the fourth conductor being electrically connected to the fourth connector, the fourth conductor and the third conductor comprising a second spring clip, (fig. 3); and

wherein the service module further comprises:

a second service wire connector configured to receive a second customer telecommunications conductor, (fig. 3; col. 2, lines 19-38); and

a second contact member that electrically connects the second service wire connector to the third conductor when the service module is mounted to the base, (fig. 3; col. 2, lines 35-38);

wherein the second spring clip electrically connects the third connector and the fourth connector when the service module is removed from the base (col. 2, lines 25-38) and wherein the second contact member is configured to electrically disconnect the first connector and the second connector when the service module is mounted in the base, (fig. 3; col. 2, line 65-col. 3, line 5).

***Regarding claim 15***, Giacoppo, as applied to claim 14, teaches wherein the nonconductive member includes a second channel in a surface thereof adjacent the third conductor when the service module is mounted to the base and wherein the second contact member is received in the second channel of the nonconductive member, (fig. 3; col. 2, lines 29-38).

***Regarding claim 16***, Giacoppo, as applied to claim 15, teaches wherein the second channel and the first channel are in opposite surfaces of the nonconductive member, (fig. 3; col. 2, lines 29-38).

***Regarding claim 19***, Giacoppo, as applied to claim 14, teaches wherein the second service wire connector comprises a first end of a fourth longitudinally extending conductive member positioned to receive the second customer telecommunications conductor (fig. 3; col. 2, lines 10-38) and wherein the second contact member comprises a second end of the fourth longitudinally extending conductive member, the second end of the fourth longitudinally extending conductive member contacting the third conductor when the service module is mounted to the base, (fig. 3).

**Regarding claim 20**, Giacoppo, as applied to claim 19, teaches wherein the first longitudinally extending conductive member further comprises a circuit connector and the fourth longitudinally extending conductive member further comprises a second circuit connector, the circuit connector and the second circuit connector being positioned to receive an electrical device therebetween, (fig. 3; col. 2, lines 28-38).

**Regarding claim 51**, Giacoppo teaches a telecommunications terminal block for making and breaking connections between a first telecommunications conductor (13b), (col. 1, lines 33-40), a second telecommunications conductor (13a) and a service wire, (22a), said terminal block comprising:

a housing (fig. 2) having a first connector connected to the first telecommunications conductor (13b) and a second connector connected to the second telecommunications conductor (13a) mounted therein, (fig. 3; col. 2, lines 19-38);

a first conductor in the housing, the first conductor being electrically connected to the first connector and having a service wire connector portion configured to receive the service wire, (col. 2, lines 19-38; fig. 3);

a switch electrically connecting the first connector and the second connector, the switch having a first state wherein the first connector is electrically connected to the second connector and a second state wherein the first connector is electrically disconnected from the second connector, (col. 2, lines 19-38; the conductor acts as a switch since it can connect/disconnect to the first and second connectors).

a third connector mounted adjacent the second connector in the housing, the first connector being electrically connected to the third connector, (fig. 3); and



a select module (the service module 20 acts as a select module since it allows the based to have a first or second position status (i.e. connected or disconnected status) positioned over the second connector and the third connector, the select module having a first position in the housing electrically connecting the second connector and the third connector and a second position in the housing wherein the second connector and the third connector are not electrically connected, (fig. 3; col. 2, lines 10-38; all elements are in the housing as shown in figure 3).

**Regarding claim 52**, Giacoppo, as applied to claim 52, teaches wherein the select module further comprises:

a housing, (fig. 3); and

a jumper conductor mounted in the housing of the select module, the jumper conductor having, when the select module is in the first position, a first end positioned to contact the second connector and a second end positioned to contact the third connector, (col. 2, lines 28-38, 65-col. 3, line 5; fig. 3).

**Regarding claim 69**, Giacoppo teaches a telecommunications terminal block for making and breaking connections with a telecommunications conductor, (col. 1, lines 33-40; fig. 3), said terminal block comprising:

a base (14) having a first connector and a second connector mounted therein, (col. 2, lines 19-25; fig. 3);

a first conductor (13b) extending from the base, the first conductor being electrically connected to the first connector, (col. 2, lines 19-38; fig. 3);

a second conductor extending from the base, the second conductor being electrically connected to the second connector, (col. 2, lines 19-25); and

Art Unit: 2645

means for electrically connecting a service wire connector to the first conductor and for interrupting the electrical connection of the first connector and the second connector when the first conductor is connected to the service wire connector and means for electrically connecting the first connector and the second connector when the first conductor is not connected to the service wire connector, (col. 2, lines 10-38; fig. 3).

**Regarding claim 70**, Giacoppo teaches a telecommunications terminal block for making and breaking connections with a severed telecommunications conductor, (col. 1, lines 33-40; fig. 3), comprising:

means for connecting to a first end and a second end of the severed telecommunications conductor, (col. 2, lines 10-38; fig. 3); and

means for connecting the first end to a customer service wire and disconnecting the first end from the second end when the first end is connected to the customer service wire and for connecting the first end and the second end when the first end is not connected to the customer service wire, (col. 2, lines 10-38; fig. 3).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 2645

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
7. Claims 27-30,32-37,41-42 and 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giacoppo in view of Stohr et al. US Patent 6,238,250.

*Regarding claim 27*, Giacoppo teaches a telecommunications terminal block for making and breaking connections with a telecommunications conductor, (col. 1, lines 33-40; fig. 3), said terminal block comprising:

a base (14) having a first connector and a second connector mounted therein, (fig. 3; col. 2, lines 19-25);

a first conductor (13b) extending from to the base, the first conductor being electrically connected to the first connector, (fig. 3; col. 2, lines 19-25);

a second conductor (13a) extending from the base, the second conductor being electrically connected to the second connector, (col. 2, lines 19-25); and

a service module configured to be mounted to the base for movement between a first position adjacent the base and a second position displaced vertically from the base, (col. 2, lines 19-38), the service module comprising:

a service wire connector (22a,22b) configured to receive a customer telecommunications conductor, (col. 2, lines 35-38); and

a contact member (23a,23b) that electrically connects the service wire connector to the first connector when the service module is in the first position, (col. 2, lines 29-38);

Art Unit: 2645

wherein the first connector and the second connector are configured so as to electrically connect the first conductor and the second conductor when the service module is in the second position (col. 2, lines 25-38) and wherein the service module is configured to interrupt the electrical connection of the first conductor and the second conductor when the service module is in the first position, (col. 2, line 65-col. 3, line 5).

Giacoppo does not specifically teaches the service module configured to be movable mounted to the based. However, the examiner believes that this is just a manner of design choice and it would have been obvious to make the service module movable mounted.

Nonetheless, in the same field of endeavor, Stohr teaches that it was well known in the art to have a telecommunication circuit in which a telecommunication line is severed with a movable mounted service module (col. 5, lines 11-27; figs. 2-5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the service module of Giacoppo by allowing the module to be removably mounted as taught by Stohr so that the user can easily break and unbreak the connection.

**Regarding claim 28**, Giacoppo, as applied to claim 27, teaches wherein the contact member is configured to disconnect the electrical connection of the first connector and the second connector when the service module is mounted to the base, (col. 2, lines 25-38; col. 2, line 65-col. 3, line 5).

**Regarding claim 29**, Giacoppo, as applied to claim 28, teaches wherein the service wire connector comprises a first end of a longitudinally extending conductive member positioned to receive the customer telecommunications conductor (col. 2, lines 35-38) and wherein the contact

Art Unit: 2645

member comprises a second end of the longitudinally extending conductive member, the second end of the longitudinally extending conductive member contacting the first conductor when the service module is mounted to the base, (fig. 3; col. 2, lines 25-38).

**Regarding claim 30**, Giacoppo, as applied to claim 29, teaches wherein the service module (20) further comprises a conductor chamber and the service wire connector is positioned in the conductor chamber, (fig. 3; col. 2, lines 29-38).

**Regarding claim 32**, Giacoppo, as applied to claim 29, teaches wherein the first conductor is positioned adjacent to the second conductor so as to contact the second conductor when the service module is removed from the base, (fig. 3; col. 2, lines 29-38).

**Regarding claim 33**, Giacoppo, as applied to claim 32, wherein the service module further comprises a nonconductive member positioned to pass between the first conductor and the second conductor when the service module is mounted to the base and wherein the first conductor and the second conductor comprise a spring clip, (fig. 3; col. 2, lines 29-38).

**Regarding claim 34**, Giacoppo, as applied to claim 33, teaches wherein the nonconductive member extends from a bottom surface of the service module adjacent the base, (fig. 3).

**Regarding claim 35**, Giacoppo, as applied to claim 33, teaches wherein the contact member comprises:

an electrically conductive layer on a surface of the nonconductive member adjacent the first conductor when the service module is mounted to the base, (fig. 3; col. 2, lines 29-38); and

a connector that electrically connects the electrically conductive layer to the service wire connector, (fig. 3).

Art Unit: 2645

**Regarding claim 36**, Giacoppo, as applied to claim 33, wherein the nonconductive member includes a channel in a surface thereof adjacent the first conductor when the service module is mounted to the base and wherein the contact member is received in the channel of the nonconductive member, (fig. 3; col. 2, line 65-col. 3, line 5).

**Regarding claim 37**, Giacoppo, as applied to claim 36, teaches wherein the first connector comprises a first end of a second longitudinally extending conductive member and the first conductor comprises a second end of the second longitudinally extending conductive member (fig. 3; col. 2, lines 10-38) and wherein the second connector comprises a first end of a third longitudinally extending conductive member and the second conductor comprises a second end of the third longitudinally extending conductive member, (fig. 3).

**Regarding claim 40**, Giacoppo, as applied to claim 36, teaches wherein the terminal block further comprises:

a third connector and a fourth connector mounted in the base (14), (fig. 3; second base in fig. 3);

a third conductor (13b) extending from the base, the third conductor being electrically connected to the third connector, (fig. 3; col. 2, lines 19-25);

a fourth conductor (13a) extending from the base, the fourth conductor being electrically connected to the fourth connector, the fourth conductor and the third conductor comprising a second spring clip, (fig. 3); and

wherein the service module further comprises:

a second service wire connector configured to receive a second customer telecommunications conductor, (fig. 3; col. 2, lines 19-38); and

Art Unit: 2645

a second contact member that electrically connects the second service wire connector to the third conductor when the service module is mounted to the base, (fig. 3; col. 2, lines 35-38);

wherein the second spring clip electrically connects the third connector and the fourth connector when the service module is removed from the base (col. 2, lines 25-38) and wherein the second contact member is configured to electrically disconnect the first connector and the second connector when the service module is mounted in the base, (fig. 3; col. 2, line 65-col. 3, line 5).

**Regarding claim 41**, Giacoppo, as applied to claim 40, teaches wherein the nonconductive member includes a second channel in a surface thereof adjacent the third conductor when the service module is mounted to the base and wherein the second contact member is received in the second channel of the nonconductive member, (fig. 3; col. 2, lines 29-38).

**Regarding claim 42**, Giacoppo, as applied to claim 41, teaches wherein the second channel and the first channel are in opposite surfaces of the nonconductive member, (fig. 3; col. 2, lines 29-38).

**Regarding claim 45**, Giacoppo, as applied to claim 40, teaches wherein the second service wire connector comprises a first end of a fourth longitudinally extending conductive member positioned to receive the second customer telecommunications conductor (fig. 3; col. 2, lines 10-38) and wherein the second contact member comprises a second end of the fourth longitudinally extending conductive member, the second end of the fourth longitudinally extending conductive member contacting the third conductor when the service module is mounted to the base, (fig. 3).

**Regarding claim 46**, Giacoppo, as applied to claim 45, teaches wherein the first longitudinally extending conductive member further comprises a circuit connector and the fourth longitudinally extending conductive member further comprises a second circuit connector, the circuit connector and the second circuit connector being positioned to receive an electrical device therebetween, (fig. 3; col. 2, lines 28-38).

**Regarding claim 47**, Giacoppo, as applied to claim 40, teaches wherein the base is elongate and defines a first axis and wherein the first spring clip is positioned adjacent and laterally offset from the second spring clip with reference to the first axis and wherein a plurality of service modules (figs 1 and 2) are removably mounted to the elongate base along the first axis, (fig. 3).

**Regarding claim 48**, Giacoppo, as applied to claim 47, teaches wherein the base includes an elongate chamber and wherein the first spring clip and the second spring clip are positioned in the elongate chamber, (fig. 3).

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Giacoppo in view of Meyerhoefer US Patent 5,704,797.

**Regarding claim 12**, Giacoppo, as applied above to claim 10, does not specifically teach wherein the service wire connector is an insulation displacing connector. However, it would have been obvious that the service wire connector is Giacoppo is an insulator displacing connector since the service wire connector is able to break the connection by touching the two conductor wires.

Nonetheless, in the same field of endeavor, Meyerhoefer teaches of severing telecommunication connections by inserting a plug into a telecommunication socket, (col. 8,



Art Unit: 2645

lines 5-17). Meyerhoefer further teaches wherein a service wire connector is an insulation displacing connector, (col. 3, lines 46-58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Giacoppo by having the service wire connector being an insulation displacing connector as taught by Meyerhoefer so that the service wire can break the telecommunication connection in the terminal.

9. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Giacoppo in view of Stohr and further in view of Meyerhoefer US Patent 5,704,797.

*Regarding claim 38*, Giacoppo, as applied above to claim 36, does not specifically teach wherein the service wire connector is an insulation displacing connector. However, it would have been obvious that the service wire connector is Giacoppo is an insulator displacing connector since the service wire connector is able to break the connection by touching the two conductor wires.

Nonetheless, in the same field of endeavor, Meyerhoefer teaches of severing telecommunication connections by inserting a plug into a telecommunication socket, (col. 8, lines 5-17). Meyerhoefer further teaches wherein a service wire connector is an insulation displacing connector, (col. 3, lines 46-58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Giacoppo by having the service wire connector being an insulation displacing connector as taught by Meyerhoefer so that the service wire can break the telecommunication connection in the terminal.

Art Unit: 2645

10. Claims 17,18,26,61,62,71,72,75,76,79-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giacoppo in view of Baum et al. US Patent 6,093,050.

*Regarding claim 17*, Giacoppo, as applied above, does not specifically teach wherein the first and second customer telecommunication conductors are tip and ring lines.

In the same field of endeavor Baum teaches wherein the first and second customer telecommunications conductors are tip and ring lines, (col. 2, line 55-col. 3, line 19; col. 9, lines 40-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the service module of Giacoppo by allowing tip and ring lines as the telecommunication conductors as taught by Baum so that any service wire that is telecommunication related can be broken which will allow testing of the lines.

*Regarding claim 18*, Giacoppo, as applied above, does not specifically teach wherein the service module further comprises a line protector.

In the same field of endeavor, Baum teaches wherein the service module further comprises a line protector electrically connected between the first conductor and the third conductor when the service module is mounted to the elongate base, (col. 2, line 55-col. 3, line 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the service module of Giacoppo by including a line protector as taught by Baum so that the service module can be protected from high voltage or current which will destroy the service module.

*Regarding claim 26*, Giacoppo teaches wherein the service module further comprises a circuit contact member that electrically connects to the second conductor when the service module is mounted to the base, the circuit contact member being configured to electrically connect an electrical device between the first connector and the second connector, (fig. 3).

*Regarding claim 61*, Giacoppo teaches a telecommunications terminal block for making and breaking connections between a telecommunication conductor and a service wire, (fig. 3, col. 1, lines 33-40), said terminal block comprising:

a housing having a first connector and a second connector mounted therein, the first connector being electrically connected to the telecommunication conductor, (col. 2, lines 19-25);

a first conductor in the housing, the first conductor being electrically connected to the second connector and having a service wire connector portion configured to receive the service wire, (col. 2, lines 19-25; figs. 2 and 3).

Giacoppo does not specifically teach an electrical protection device electrically connecting the first connector and the second connector.

In the same field of endeavor, Baum teaches an electrical protection device position in series between and electrically connecting the first connector and the second connector, (col. 2, line 55-col. 3, line 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the service module of Giacoppo by including a line protector as taught by Baum so that the service module can be protected from high voltage or current which will destroy the service module.

**Regarding claim 62**, Giacoppo in view of Baum teaches wherein the electrical protection device is a fuse circuit, (col. 3, lines 37-55, Baum).

**Regarding claims 71,72,75,76 and 79-82**, Giacoppo, as applied above, does not specifically teach a chamber including an environmental sealant that protects the electrical connection of the first connector and the second connector and wherein the environmental sealant is a gel.

In the same field of endeavor, Baum teaches an environmental sealant in the elongate chamber and in the conductor chamber, (col. 1, lines 18-23,56-65) and wherein the environmental sealant is a gel, (col. 1, lines 45-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the service module of Giacoppo by providing an environmental sealant in the chamber as taught by Baum so that the service module can be protected from outside environmental harm.

11. Claims 43,44,49,73 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giacoppo in view of Stohr and further in view of Baum et al. US Patent 6,093,050.

**Regarding claim 43**, Giacoppo, as applied above, does not specifically teach wherein the first and second customer telecommunication conductors are tip and ring lines.

In the same field of endeavor Baum teaches wherein the first and second customer telecommunications conductors are tip and ring lines, (col. 2, line 55-col. 3, line 19; col. 9, lines 40-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the service module of Giacoppo by allowing tip and ring lines as

the telecommunication conductors as taught by Baum so that any service wire that is telecommunication related can be broken which will allow testing of the lines.

***Regarding claim 44***, Giacoppo, as applied above, does not specifically teach wherein the service module further comprises a line protector.

In the same field of endeavor, Baum teaches wherein the service module further comprises a line protector electrically connected between the first conductor and the third conductor when the service module is mounted to the elongate base, (col. 2, line 55-col. 3, line 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the service module of Giacoppo by including a line protector as taught by Baum so that the service module can be protected from high voltage or current which will destroy the service module.

***Regarding claim 49***, Giacoppo teaches wherein the service module further comprises a circuit contact member that electrically connects to the second conductor when the service module is mounted to the base, the circuit contact member being configured to electrically connect an electrical device between the first connector and the second connector, (fig. 3).

***Regarding claims 73-74***, Giacoppo, as applied above, does not specifically teach a chamber including an environmental sealant that protects the electrical connection of the first connector and the second connector and wherein the environmental sealant is a gel.

In the same field of endeavor, Baum teaches an environmental sealant in the elongate chamber and in the conductor chamber, (col. 1, lines 18-23,56-65) and wherein the environmental sealant is a gel, (col. 1, lines 45-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the service module of Giacoppo by providing an environmental sealant in the chamber as taught by Baum so that the service module can be protected from outside environmental harm.

***Allowable Subject Matter***

12. Claims 5,13,21-25,31,39,53-58,63 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Claims 59,60,77 and 78 are allowed.

***Response to Arguments***

14. Applicant's arguments filed September 1, 2004 have been fully considered but they are not persuasive.

***Regarding claim 1***, Applicant contends that Giacoppo fails to disclose a terminal block including both a service wire connection portion and connections to incoming and outgoing communication lines and that Giacoppo discloses only a single connection point and conductors extending therefrom out a back end of the bosses 6 and socket 20. The Examiner respectfully disagrees.

15. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., incoming and outgoing communications) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

As stated in the Office Action Giacoppo teaches of more than one connection point. Each wire as shown in at least fig. 3 is a connection and as shown, is separate. For example, 12a is separate from 12b and 22a is separate from 22b. These connections represent multiple connections and thus, Giacoppo teaches of more than one connection point. Furthermore, the service wire connector 22a,22b is able to receive a customer telecommunications conductor which can come from lines 12a and 12b via conductors 13a,13b when the service module is mounted on the terminal block.

**Regarding claim 27**, the Examiner agrees with Applicants in that the service module in Giacoppo is not movably mounted. However, the Examiner believes that this is just an obvious design choice and the Examiner will modify the rejection accordingly.

**Regarding claim 51**, Applicant amendment necessitated new grounds of rejection.

**Regarding claim 59**, the Examiner agrees with Applicants and in view of the cited art believes that claim 59 is now allowable.

**Regarding claim 61**, Applicant amendment necessitated new grounds of rejection.

**Regarding claim 69**, Applicant contends that Giacoppo does not teach, "means for electrically connecting a service wire connector". The Examiner respectfully disagrees.

Giacoppo teaches of means (23a, 23b), which connect the service wire connection to the first conductor as shown in fig. 3 and the Office action above. Furthermore, the module 20 is as a whole also the means, since it can electrically connect to the first conductor and disconnected to the first conductor as taught in col. 2, lines 10-38

**Regarding claim 70**, Applicant contends that Giacoppo does not teach of the structure for the "means for" recitations, the Examiner respectfully disagrees.

Art Unit: 2645

Each of the claimed elements is specifically shown in Giacoppo. For example, claim 70, requires a means for connecting to a first end and a second end of the severed telecommunication conductor. The examiner believes that this clearly reads on the means 22a and 22b, which will connect to the severed conductors (13a, 13b) when the module 20 connects to the terminal block 10. Given the broad limitations of the claim the Examiner believes that the claimed structure does not read away from Giacoppo and thus the rejection is maintained.

***Conclusion***

16. Any response to this action should be mailed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

or faxed to:

(703) 872-9306, (for formal communications intended for entry)

Or:

(703) 872-9306, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to:

220 20<sup>th</sup> Street S.  
Crystal Plaza two, Lobby, Room 1B03  
Arlington, VA 22202

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ovidio Escalante whose telephone number is 703-308-6262. The examiner can normally be reached on M-F (6:30AM - 5:00PM).



Art Unit: 2645

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan S Tsang can be reached on 703-305-4895. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**OVIDIO ESCALANTE**  
**PATENT EXAMINER**



Ovidio Escalante  
Examiner  
Group 2645  
December 21, 2004

O.E./oe